

**Notice of Allowability**

Application No.

10/553,876

Examiner

Ashok Patel

Applicant(s)

KUMA, HITOSHI

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/24.
2. ☒ The allowed claim(s) is/are 1-3 and 7-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                            |                                                                                       |
|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|                                                                                                            | 9. <input type="checkbox"/> Other _____                                               |

1. The following is an examiner's statement of reasons for allowance: withdrawal of: (1) prior art rejection of independent claims 1, 2 and 7-10 in view of applicant's amendment of claims 1 and 2 and in view of persuasive arguments relating to the amended independent claims 1 and 2.

Prior art of the record does not disclose applicant's claimed organic EL device including: a transparent and counter electrodes, one or more conductive layers and one or more organic emitting layers, as recited in claims 11 or 14 or 17 or 20 or 23 or 27,

wherein the difference between  $n_a$  and  $n_b$  is 0.2 or less when  $n_a$  is the refractive index of an intermediate conductive layer and  $n_b$  is the refractive index of an organic emitting layer, and the intermediate conductive layer, the refractive index of which is  $n_a$ , is a laminate including a layer having a higher refractive index than  $n_b$  and a layer having a lower refractive index than  $n_b$ , as specifically recited in claim 11; or

wherein the difference between  $n_a$  and  $n_b$  and/or  $n_c$  is 0.2 or less when  $n_a$  is the refractive index of an intermediate

conductive layer and  $n_b$  is the refractive index of a first organic emitting layer,  $n_c$  is the refractive index of a second organic emitting layer, and the intermediate conductive layer sandwiched between the first and second organic emitting layers, and the intermediate conductive layer, the refractive index of which is  $n_a$ , is a laminate including a layer having a higher refractive index than  $n_b$  and/or  $n_c$  and a layer having a lower refractive index than  $n_b$  and/or  $n_c$ , as recited in claim 14; or

wherein the difference between  $n_a$  and  $n_b$  is 0.2 or less when  $n_a$  is the refractive index of an intermediate conductive layer and  $n_b$  is the refractive index of an organic emitting layer, and the intermediate conductive layer, the refractive index of which is  $n_a$ , is a layer including a mixture of a material having a higher refractive index than  $n_b$  and a material having a lower refractive index than  $n_b$ , as recited in claim 17; or

wherein the difference between  $n_a$  and  $n_b$  and/or  $n_c$  is 0.2 or less when  $n_a$  is the refractive index of an intermediate conductive layer and  $n_b$  is the refractive index of a first organic emitting layer,  $n_c$  is the refractive index of a second organic emitting layer, the intermediate conductive layer sandwiched between the first and second organic emitting layers, and the intermediate conductive layer, the refractive index of which is  $n_a$ , is a layer including a mixture of a material having a higher refractive index than  $n_b$  and/or  $n_c$  and a material having a lower refractive index than  $n_b$  and/or  $n_c$ , as recited in claim 20; or

wherein the difference between  $n_a$  and  $n_b$  is 0.2 or less when  $n_a$  is the refractive index of an intermediate conductive layer and  $n_b$  is the refractive index of an organic emitting layer, and the intermediate conductive layer, the refractive index of which is  $n_a$ , includes a material having a low refractive index and a

transparent conductive material selected from oxides, nitrides, iodides and borides of metals, as recited in claim 23 or

wherein the difference between  $n_a$  and  $n_b$  and/or  $n_c$  is 0.2 or less when  $n_a$  is the refractive index of an intermediate conductive layer,  $n_b$  is the refractive index of a first organic emitting layer and  $n_c$  is the refractive index of a second organic emitting layer, the intermediate conductive layer sandwiched between the first and second organic emitting layers, and the intermediate conductive layer, the refractive index of which is  $n_a$ , includes a material having a low refractive index and a transparent conductive material selected from oxides, nitrides, iodides and borides of metals, as recited in claim 27.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ashok Patel**  
**Primary Examiner**  
**Art Unit 2879**